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10/776,856	02/11/2004	Nagaraj Jayanth	0315-510/COD	3884
27572	7590	10/27/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			JIANG, CHEN WEN	
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/776,856
Filing Date: February 11, 2004
Appellant(s): JAYANTH ET AL.

Michael Malinzak
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 7/27/2006 appealing from the Office action mailed 10/19/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

Appellants filed a Request for a Pre-Appeal Brief Review on March 20, 2006. A copy of the Notice of Panel Decision from Pre-Appeal Brief Review mailed June 27, 2006 is attached in the Appendix B of Appellants' Appeal Brief.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows: Whether the combination of Sharood et al. (U.S. Pat. No. 6,453,687) in view of Wiggs (U.S. Pat. No. 4,463,571) establishes a prima facie case of obviousness under 35 U.S.C. § 103(a), with respect to *Claims 1, 9-10 and 14*.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,453,687	SHAROOD et al.	9-2002
4,463,571	WIGGS	8-1984

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 9-10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharood et al. (U.S. Patent Number 6,453,687) in view of Wiggs (U.S. Patent Number 4,463,571). Sharood discloses a compressor assembly having a compressor connected to an electric motor and electronic circuitry including current sensing means (see 610 of Figure 6c) for diagnosing problems with the system including determining how long the compressor has been on (see col. 27, line 42 to col. 28, line 64) and communicating to a computer 190 having a visual display. Wiggs teaches monitoring the status of compressor motor protectors in order to provide an indication as to which motor protector caused the compressor to stop. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Sharood such that it included monitoring the status of compressor motor protectors in order to provide an indication as to which motor protector caused the compressor to stop in view of the teachings of Wiggs.

(10) Response to Argument

Applicant argues “Lack of Suggestion or Motivation to Combine References”

Sharood et al.

In re pages 7-8, Applicant first argues that Sharood et al. fail to teach or suggest monitoring a motor protector of a compressor. Applicant argues the features disclosed by Sharood et al. are not associated with the motor protector. In response, the Examiner asserts that Sharood et al. disclose the retrofit plug is a plug-through device that is either attached in line with the main appliance electrical supply or internally in line with a main control board interface connector of an appliance (col.8, lines 14-24). The retrofit plug can be designed specifically for a particular appliance to perform sophisticated diagnosis, monitoring, and control specific to the appliance. In addition, a temperature sensor is fitted inside the freezer compartment to measure the freezer's interior temperature (col. 10, lines 17-59). The Examiner remains the position that the compressor/motor is monitored through the retrofit plug because the appliance (refrigerator or HVAC) electrical supply line connected to the compressor/motor and Sharood et al. disclose the retrofit plug is a plug-through device that is attached in line with the main appliance electrical supply. Sharood et al. also disclose the retrofit plug includes monitoring circuitry. For example, a measure and transmit circuit is connected to a current transformer to measure the current being by the appliance attached to the retrofit (col. 9, lines 6-9). Therefore, Sharood et al. disclose the feature of compressor motor monitoring. In regard to the "as function of time" argument, Examiner asserts that the diagnosis, monitoring and control processes are function of time.

Wiggs

In re pages 8-9, Applicant argues that Wiggs does not disclose monitoring the status of switches as a function. Examiner asserts that the diagnosis, monitoring and control processes are function of time.

Sharood et al. and Wiggs: Applicant argues "No Motivation to Combine"

In re pages 9-10, Applicant argues, "Sharood et al. disclose that the retrofit plug (2650) may be used to detect a door open condition of a refrigeration appliance (2600). But providing the retrofit plug (2650) with the ability to monitor high and low pressure switches of a compressor would not enhance the ability of Sharood's retrofit plug (2650) to detect the door open condition because the retrofit plug (2650) bases its determination of a door-open condition on a run time of a compressor". In response, Examiner asserts that Sharood et al. disclose the retrofit plug can be designed specifically for a particular appliance to perform sophisticated diagnosis, monitoring, and control specific to the appliance (col. 10, lines 17-20); e.g., current to the appliance (col.9, lines 6-9), compartment temperature, door-open/lock of the appliance, health monitoring, appliance maintenance and HVAC control. Compressor is a major component of the refrigerator and driven by a motor. Sharood et al. also disclose the retrofit plug is a plug-through device that is either attached *in line with the main appliance electrical supply* or internally in line with a main control board interface connector of an appliance (col.8, lines 14-24). Although Sharood et al. imply compressor-motor-retrofit plug connection but do not disclose motor detector explicitly, the teaching of the motor detector location of Wiggs with temperature and pressure switches monitoring provided the Rejection in the Office Action. In summary, the Rejection is based the teaching of retrofit plug (diagnostic system with logic circuitry, input current) in line to the appliance (compressor/motor) as disclosed by Sharood et al. in combination with motor protector having pressure and temperature sensors as taught by Wiggs. The door open condition is just one of the parameters disclosed by Sharood et al. in the specification and has not been used in the rejection. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the system of

Sharood such that it included monitoring the status of compressor motor protectors in order to provide an indication as to motor protector operation conditions (input current by Sharood et al. and temperature/pressure by Wiggs) in view of the teachings of Wiggs.

Sharood et al. and Wiggs: Applicant argues “Inoperable for Its Intended Purpose”

In re pages 9-10, Applicant argues that “there is no suggestion or motivation to combine the teachings of Sharood et al. with Wiggs as such a combination would render the device of Sharood et al. inoperable for its intended purpose”. Applicant described that Wiggs monitor a length of time a switch associated with a compressor is open or closed does not indicate compressor run time and therefore renders the Sharood et al. device inoperable for its intended purpose of detecting a door-open condition. In response, the door open condition is just one of the parameters disclosed by Sharood et al. in the specification and has not been used in the rejection. The measure and transmit circuitry can send messages to the control server 100 in response to events which indicate a state of the appliance 130 requiring some further action (e.g., shut off power) (Sharood et al., col.9, lines 37-41). The measure circuitry includes input current, power and voltage. Also, the retrofit plug 125 can be designed specifically for a particular appliance (Sharood et al., col.10, lines 17-18). Therefore, the circuitry (input current, power and voltage) of Sharood et al., not the door-open asserted by the Applicant, in combination with Wiggs is operable.

For the above reasons, it is believed that the rejections should be sustained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

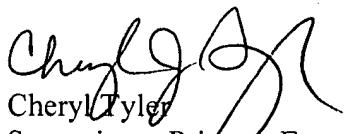
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Respectfully submitted,

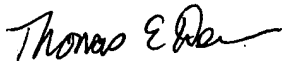


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